

REMARKS

This Amendment and Response is filed in reply to the Office action dated July 6, 2006. Claims 1-15, 23, 27 and 31-37 are amended, new claim 38 is added, and claims 16-22, 24-26 and 28-30 are canceled. Accordingly, after entry of this Amendment and Response, claims 1-15, 23, 27 and 31-38 remain pending. Support for new claim 38 is found at least at paragraph [1031] of the specification.

I. Claim Objections

Claim 31 is objected to because of informalities. In response, claim 31 has been amended to correct the informalities. Applicant believes that no new subject matter has been added by this amendment and that claim 31 is now in allowable form.

II. Claim Rejections Under 35 U.S.C. § 112

Claims 1, 13, 15, 23, 31 and 36 are rejected under 35 U.S.C. § 112 as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Essentially, the rejection appears to focus on the clarity of the claim language. In response, claims 1, 13, 15, 23, 31 and 36 are amended to clearly set forth and claim the subject matter which the Applicant regards as the invention. Support for these amendments is found at least at paragraphs [1006], [1023], [1024], and [1028]. Applicant believes that claims 1, 13, 15, 23, 31, and 36, as amended herein, are now in compliance with 35 U.S.C. § 112 and such indication is respectfully requested.

III. Claim Rejections Under 35 U.S.C. § 101

Claims 23-26 and claims 31-35 are rejected under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter. Specifically, the Office action states that claims 23-26 refer to computer readable encoding or a computer program without storing and executing in a computer readable medium and therefore not directed to statutory subject matter. In response, claim 23 has been amended to store the computer readable encoding on a computer readable medium, a tangible embodiment, and claims 24-26 have been canceled. Applicant believes that claim 23, as amended, is directed to statutory subject matter in compliance with 35 U.S.C. § 101.

Additionally, the Office action states that claims 31-35 appear to be an abstract idea rather than a practical application of the idea and do not result in a physical transformation and do not appear to provide a useful, concrete and tangible result and accordingly, are not directed to statutory subject matter. In response, claims 31-35 have been amended to

specify an article of manufacture, a tangible embodiment, and further to provide for a useful result, i.e., the correction of timing path violations. In light of this, Applicant believes that claims 31-35, as amended herein, are directed to statutory subject matter in compliance with 35 U.S.C. § 101.

IV. Claim Rejections Under 35 U.S.C. § 102

Claims 1, 2, 10-21, 23-25, 27-29, 31-34 and 36-37 are rejected under 35 U.S.C. § 102 as being anticipated by U.S. Patent Application Publication No. 2005/0050496A1 to Kovacs et al (hereinafter “Kovacs”). An anticipation rejection under 35 U.S.C. § 102 requires that each and every limitation of a claim be disclosed in a single prior art reference.

Initially, the rejection of independent claims 1, 15, 31 and 36 is addressed. As discussed above, claims 1, 15, 31 and 36 have been amended to particularly point out and distinctly claim the subject matter of the invention. As amended herein, claims 1, 31 and 36 include the limitation “repeating the first timing path violation correction for at least one of the other timing paths within the group.” Claim 15, as amended, specifies an integrated circuit fabricated using the method of claim 1 and therefore includes the same limitation. The independent claims, as amended herein, require that the correction of a timing path violation for a timing path in a group of timing paths with a common characteristic be replicated in the remaining timing paths in the group. Thus, additional timing path violations are corrected without having to calculate additional timing information for those timing paths.

In contrast, Kovacs does not consider correction of additional timing paths based on the correction made for one timing path. At most, Kovacs teaches correction of two timing paths sharing a common wire that is lengthened to remove the timing violations in the two timing paths due to crosstalk from another timing path (see *Kovacs* figure 1, paragraphs [0021 -0025]). As such, Kovacs does not teach identifying timing paths having a similar arrangement of circuit elements but which paths do not necessarily have any shared circuit elements, determining a correction for one of the timing paths and replicating the correction for the other timing paths in the group as required by the independent claims. Further, in *Kovacs* individualized timing determinations must be made before selecting a wire to replace in other timing paths (see *Kovacs* paragraphs [0027-30] and figures 2 and 3). That is, in *Kovacs* each correction made to a timing path requires a separate timing computation. The independent claims require that a correction to one timing path be replicated to other timing paths in a group of timing paths unlike *Kovacs* that requires doing additional timing computations.

Because *Kovacs* does not teach replicating the correction to other timing paths in a group of timing paths having a common characteristic as required by independent claims 1, 15, 31 and 36, it cannot anticipate independent claims 1, 15, 31 and 36. Therefore, it is

respectfully submitted that these claims are allowable over Kovacs and such indication is respectfully requested.

The remaining rejected claims all depend, either directly or indirectly, from one of independent claims 1, 15, 31 and 36. Accordingly, these dependent claims are themselves patentable over Kovacs for at least the same reasons as the independent claims and such indication is respectfully requested. This statement is made without reference to or waiving the independent bases of patentability within each dependent claim.

V. Allowable Subject Matter

The Examiner is thanked for the indication that claims 3, 22, 26, 30 and 35 would be allowable if written in independent form, including all the limitations of the base claims and any intervening claims. The amendment of independent claims 15, 23 and 27 make dependent claims 22, 26 and 30 duplicative of dependent claim 3. Therefore dependent claims 22, 26 and 30 have been canceled. Dependent claims 3 and 35 have not been amended herein to be written in independent form. For the above discussed reasons with regard to independent claims 1 and 31, from which claims 3 and 35 depend, it is believed that all claims are in form for allowance and such indication is respectfully requested. Applicant reserves the right to amend claims 3 and 35 in independent form at a later date.

VI. Conclusion

The Applicant thanks the Examiner for his thorough review of the application. The Applicant respectfully submits the present application, as amended, is in condition for allowance and respectfully requests the issuance of a Notice of Allowability as soon as practicable.

This Amendment is submitted contemporaneously with a petition for a three-month extension of time in accordance with 37 C.F.R. § 1.136(a). Accordingly, please charge Deposit Account No. 04-1415 in the amount of \$1020.00, for a three-month extension of time fee. The Applicant believes no further fees or petitions are required. However, if any such petitions or fees are necessary, please consider this a request therefore and authorization to charge Deposit Account No. 04-1415 accordingly.

If the Examiner should require any additional information or amendment, please contact the undersigned attorney.

Dated: 23 JAN 2007

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Gregory R. Durbin', written over a horizontal line.

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